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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,251	05/25/2001	Izuru Shinzato	209049US0	3386

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EXAMINER

KRISHNAN, GANAPATHY

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 09/23/2002

3

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/864,251

Applicant(s)

SHINZATO ET AL.

Examiner

Ganapathy Krishnan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1- 5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.                      6) ☐ Other:

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is confusing. It recites a percentage by weight for nucleic acid, a percentage by weight for glutamine and glutamic acid and a percentage by weight for the mixture of at least two additives selected from the group consisting of nucleic acid, glutamine and glutamic acid. It is not clear which of these percentages recited is to be used for the additives. If only two additives are to be used in the composition, then the percentage by weight for two additives should be recited.

## **JOINT INVENTORS**

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada et al (USPN 3,686,392) in combination with GB Patent (1200582) and WPI/Derwent document (XP-002087888).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 4 and 5 are drawn to a composition for livestock feed comprising a feed and at least two additives selected from nucleic acid, glutamine and glutamic acid; wherein the feed is selected from milk replacer, pre-starter and starter feed; wherein the nucleic acid is added in an amount from 0.01 to 2.5% by weight, the glutamine and glutamic acid is added in an amount from 0.05 to 2.5 % by weight, and a mixture of at least two additives selected from nucleic acid,

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glutamine and glutamic acid is added in an amount from 0.05 to 5 % by weight; a method for increasing body weight gain efficiency and feed efficiency in livestock by administering the said composition and administration of the said composition during weaning period.

Hamada et al disclose feed compositions for livestock containing 5'-nucleotides, glutamic acid or glutamate. These additives were added to a milk replacer and pre-starter compositions (see col. 9, line 44 through col. 10, line 67) and were found to increase the rate of growth of livestock and improve the feed efficiency (see col. 1, lines 1-49). Pigs fed at weaning with a milk replacer (colostrum) containing the 5'-nucleotides showed weight gain (see col. 3 line 5 through col. 4 line 26).

However, Hamada et al do not teach the use of glutamine and nucleic acid as additives in their compositions.

The GB patent (1200582) discloses dog food compositions containing ribonucleic acid and a salt of glutamic acid (see claims 1, 15 and 22).

WPI/Derwent document (XP-002087888) discloses animal feed containing mixtures of crystalline amino acids, which includes glutamine and glutamic acid.

It would have been prima facie obvious to one of skill in the art at the time the invention was made to combine the teachings of the prior art cited above to produce a composition for livestock comprising a feed, and any two additives selected from nucleic acid, glutamine and glutamic acid for the purpose of increasing weight gain efficiency and feed efficiency with reasonable amount of success since all these ingredients and the compositions containing them have been disclosed in the prior art.

One of ordinary skill in the art would have been motivated to do so because:

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(a) the metabolism of the nucleic acid in the feed would result in generation of extra energy (b) intake of feed by livestock, especially young ones, will be more because of the flavor enhancing property of glutamic acid and (c) glutamine has an immune enhancing effect.

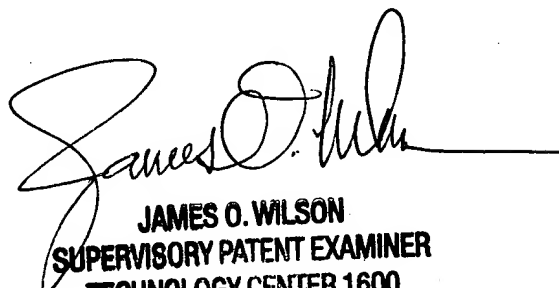
The use of a combination of any two of the three additives has a beneficial effect on the growth of livestock.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ganapathy Krishnan whose telephone number is 703-305-4837. The examiner can normally be reached on 8.30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Wilson can be reached on 703-308-4624. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.

GK  
September 22, 2002

  
**JAMES O. WILSON**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 1600**  
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